CALARE CIVIL
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20250158
7 February 2025

ABC Steel & Sheds

Attention: Manager

Dear Manager

RE: Proposed Hangar – Rylstone Aerodrome Airpark, Rylstone

We certify that we have checked the structural design of the proposed hangar as shown on the following drawings:

Drawing No.	Description	Revision
2256-S01	Proposed Hangar – Rylstone Aerodrome Airpark, RYLSTONE – Roof Plan	29/1/2025
2256-S02	Proposed Hangar – Rylstone Aerodrome Airpark, RYLSTONE – Slab Plan	29/1/2025
2256-S03	Proposed Hangar – Rylstone Aerodrome Airpark, RYLSTONE – Section	29/1/2025
2256-S04	Proposed Hangar – Rylstone Aerodrome Airpark, RYLSTONE – Elevations	29/1/2025

This review has been carried out in accordance with the following SAI Codes of Practice:

- NCC:2022 Building Code of Australia, Volume 1
- AS/NZS 1170.0:2002 Structural Design Actions – General Principles
- AS/NZS 1170.1:2002 Structural Design Actions – Permanent, Imposed and Other Actions
- AS/NZS 1170.2:2021 Structural Design Actions – Wind Actions
- AS 1562.1:2018 Design and Installation of Sheet Roof and Wall Cladding, Part 1: Metal
- AS 2870:2011 Residential Slabs and Footings
- AS 3600:2018 Concrete Structures
- AS 4100:2020 Steel Structures
- AS/NZS 4600:2018 Cold-formed Steel Structures
- CCAA T48 Guide to Industrial Floors and Pavements

Accordingly, the structure as shown would be sufficient to carry the relevant loads specified in AS/NZS 1170, SAI Structural Design Actions Code (Parts 0, 1 and 2).
Furthermore, the structure has been designed based on a Deemed-to-Satisfy solution complying with the deemed-to-satisfy provisions of the NCC-2022 Volume 1, as outlined in parts B1D2 to B1D4 (inclusive).
Note the following design criteria have been adopted:

- Design based on an enclosed building (as defined in AS/NZS 1170.2);
- Structure Importance level 2 (normal structure), in accordance with the BCA;
- Super-imposed dead load to roof = 0.20kPa, and live load to roof = 0.25kPa;
- Live load to slab = 5.0 kPa or a maximum vehicle weight not exceeding 3.0 tonne;
- Wind region A3 (non-cyclonic), with a terrain category of 2.0 (open terrain) in accordance with AS/NZS 1170.2, and a regional wind speed of $V_{R,500}$ = 45m/s (M_s = 1.00, M_t = 1.00, and M_d, $M_{z,cat}$ in accordance with AS/NZS 1170.2);
- Equivalent short-term Young's Modulus for subgrade = 28MPa with CBR > 10% for sub-base;

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- Site is to be prepared in accordance with AS 3798 with subgrade compacted to 98% std;
- Assumed site reactivity classification = M (in accordance with AS 2870); and
- Soil bearing pressure = 200kPa.

This certification shall not be construed as relieving any other party of their responsibilities, liabilities or contractual obligations.
We trust that this information meets your requirements. Please do not hesitate to contact the undersigned should you require any further information.